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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/648,414
Filing Date: August 26, 2003
Appellant(s): NEVILLE ET AL.

Russell Neville and David Halvor
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 07 May 2008 and the corrections filed 13 May 2008
appealing from the Office action mailed 07 December 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

7,013,410	ASAUCHI, Noboru	03-2006
6,879,973	SKAANNING et al.	04-2005
6,209,048	WOLFF, Gregory	03-2001

5,727,135	WEBB et al.	03-1998
7,168,003	LOZANO et al.	01-2007

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-9, 12-14, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asauchi (7,013,410) in view of Skaanning et al. (6,879,973) and Wolff (6,209,048).

3. For claims 1, 12, Asauchi teaches a method and system (abstract) for performing diagnostics on a computer peripheral device (col. 1, line 1 – col. 4, line 45; col. 17, lines 1-60), said method comprising:

- a. coupling a computer executing a web browser (col. 3, line 60 – col. 4, line 30) to a backend server (col. 5, lines 5-20) via a communication link (Fig. 1);
- b. constructing and sending a peripheral device message to a client requester from a responder program executing in a peripheral device coupled to the computer (col. 8, lines 30-65; col. 10, lines 15-25), the peripheral device message comprising peripheral device functionality information (col. 5, line 55 – col. 6, line 10; col. 10, lines 25-55);

- c. forwarding said peripheral device message (col. 7, line 45 – col. 8, line 30; col. 10, line 55 – col. 11, line 5) from said responder program to said backend server (col. 5, lines 3-40);
 - d. constructing and transmitting from said backend server to said peripheral device one of a directive web page (col. 9, line 55 – col. 10, line 5) requesting more information from the peripheral device and a human readable web page that contains diagnostic results (col. 11, line 5 – col. 12, line 55);
 - e. automatically responding to a directive web page received at the web server with another peripheral device message comprising functionality information (col. 13, line 55 – col. 14, line 15); and
 - f. iteratively communicating between said backend server and said peripheral device (col. 9, lines 1-45) until said human readable web page is constructed by said backend server (col. 12, line 55 – col. 13, line 55).
4. Asauchi does not expressly disclose that the client requestor is said web browser, such that communication occurs through the browser. Skaanning teaches a method and system (abstract) of performing automated diagnoses of printer systems (col. 1, line 1 – col. 7, line 45) using a rules-based diagnostic database (col. 7, line 45 – col. 8, line 60) through a web browser (col. 8, line 60 – col. 9, line 55). At the time the invention was made, one of ordinary skill in the art would have added Skaanning to Asauchi in order to lower diagnosis costs for end users (col. 1, lines 15-20).
5. Asauchi does not expressly disclose that the peripheral device message uses the HTTP protocol or that the responder program is a web server. Wolff teaches a method and system

(abstract) of receiving peripheral device functionality information (col. 1, line 1 – col. 3, line 40; col. 9, line 15 – col. 10, line 45) that comprises this limitation (Fig. 2; col. 5, line 30 – col. 9, line 15). At the time the invention was made, one of ordinary skill in the art would have added Wolff's web server peripheral in order to ensure the usage of standardized drivers (col. 10, lines 25-35).

6. For claims 2, 13, Asauchi teaches said peripheral device being an image reproduction device (Fig. 1, #20).
7. For claims 3, 14, Asauchi teaches said image reproduction device being a printer (Fig. 1, #20).
8. For claims 5, 16, Asauchi teaches said communication link being a network such as a LAN (col. 4, lines 5-15), but does not expressly disclose that the network is the World Wide Web. Wolff teaches this limitation (col. 3, lines 40-65).
9. For claims 6, 17, Asauchi teaches constructing and transmitting iterative responses to peripheral HTTP messages with reference to a rules based diagnostic database (knowledge bases) operating with said backend server (col. 7, line 1 – col. 9, line 55).
10. For claims 7, 18, Asauchi teaches executing code in said directive web pages to manipulate features of said peripheral device (col. 11, line 55 – col. 13, line 5, i.e. deleting or reinstalling programs).
11. For claims 8, 19, Asauchi teaches said diagnostic results identifying a user executable solution to a problem corresponding to data in the peripheral device HTTP message (col. 11, line 55 – col. 13, line 5, i.e. testing the connection).

12. For claims 9, 20, Asauchi does teach the suggestion of hardware repair methods (col. 12, lines 19-20), but does not expressly disclose said diagnostic results identifying a user-replaceable peripheral device component that can be replaced to solve a problem corresponding to data in the peripheral device HTTP message. Skaanning teaches this limitation (col. 13, lines 55-67).

13. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asauchi and Skaanning and Wolff as applied to claims 1 and 12 above, and further in view of Webb et al. (5,727,135).

14. For claims 4 and 15, Asauchi and Skaanning and Wolff do not expressly disclose generating said peripheral device functionality information with a PostScript function interface in response to a call from said web server. Webb teaches a method and system (abstract) of obtaining functionality information from a printer (col. 1, line 1 – col. 7, line 35; col. 24, lines 1-15) via a PostScript interface (col. 12, lines 5-10). At the time the invention was made, one of ordinary skill in the art would have added Webb in order to operate with legacy drivers (col. 8, lines 35-45).

15. Claims 10, 11, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asauchi and Skaanning and Wolff as applied to claims 1 and 12 above, and further in view of Lozano et al. (7,168,003).

16. Asauchi and Skaanning and Wolff do not expressly disclose that web pages are constructed with the HTML format nor do they expressly disclose that printer functionality information comprises data in an XML format. Lozano teaches a method and system (abstract)

of remotely maintaining printers (col. 1, line 1 – col. 4, line 20; col. 12, lines 30-50), wherein communications are used as described in an HTML format (col. 4, line 20 – col. 6, line 50) and XML format (col. 10, line 25 – col. 12, line 30 and Appendix A). At the time the invention was made, one of ordinary skill in the art would have added these features to improve analysis-updating methods (col. 4, lines 55-65).

(10) Response to Argument

Applicant's arguments filed 13 May 2008 have been fully considered but they are not persuasive. An analysis of the arguments is provided below.

Applicant argues that Asauchi does not expressly disclose that the communication occurs through the browser, but occurs through the client side agent (Pp. 3-4). This is correct, and the examiner does not rely on Asauchi alone in order to prove the non-obviousness of the limitation.

In the alternative, applicant is reminded that, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Examiner is to interpret the meaning of the term “browser” in the broadest reasonable manner, based on the specification and the knowledge of one of ordinary skill in the art. In Asauchi, there is at least an inherent connection between a browser and a computer interface, wherein the browser cannot communicate on a network on its own but must rely on the communications functions of the executing computer. It is not the position of the examiner that Asauchi teaches the coupling of a client browser and a

client side agent. But such a coupling would at least be obvious to try for one of ordinary skill in the art, and the need of a browser to connect to some communications software would provide motivation to make the connection. The examiner does not rely on this argument, because Skaanning teaches the limitation.

Applicant argues that Asauchi does not expressly disclose using the HTTP protocol (P. 4). This is correct, and the examiner does not rely on Asauchi alone in regards to the non-obviousness of the limitation. It is noted, however, that Asauchi does not specify any particular protocol, even as an example, but a protocol of some form is inherent in the definition of a message.

In the alternative, the particular protocol of the sent message is non-functional, and does not change the functionality or structure of the claims in any disclosed fashion. After all, one can communicate over the Internet using protocols other than the HTTP protocol. The examiner therefore could have argued that such a limitation does not patently distinguish the claimed invention, as it lacks any impact on how the message is transferred or processed. The examiner could have also rejected the claim under official notice, as HTTP messages over a LAN are well known in the art at the time of the invention. The examiner does not do so, since Wolff teaches this limitation.

Applicant then argues that Skaanning does not teach forwarding the received message, but only the content of said message (Pp. 4-5). In doing so, applicant narrowly interprets both Skaanning and its own interpretations.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the definition of forwarding) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). As one of ordinary skill in the art may attest, the act of forwarding does not by definition require that the message not be touched between the time of reception and retransmission, and in fact often requires some level of message processing, translation or conversion. The claims as drawn do not preclude the possibility of changing the message before retransmission, and the specification does not define it as such. There is also no limitation requiring the message to be a "non-human readable" form, nor any mention of conversion from non-human readable to human readable. "Constructing... a human readable web page" says nothing about the form of the input message.

Furthermore, such a difference is, at best, a non-functional terminology issue. Applicant does not make any remarks in regards to how the retransmission of the message differs from the retransmission of the message content, either functionally or structurally. Nor does the application provide any idea of intent such that one would be motivated to choose content over message. Applicant does not even discuss what the contours of the difference is; the message and the message content would be the same to one of ordinary skill in the art. But even if there is a difference, it cannot possibly be of sufficient functionality to be considered a patentable difference.

But all of the above is moot in the fact that the Applicant's interpretation of Skaanning seems incomplete. Applicant fails to cite any item wherein Skaanning teaches message

extraction or any other form of changing message to content before forwarding, and examiner cannot find a single sentence to the fact. The best that can be said is that Skaanning may be ambiguous on the issue (it may or may not change the message) but this alone is insufficient to obviate the 103 rejection, since we would then consider Skaanning as teaching both embodiments, for this particular situation. Furthermore, Skaanning clearly and deliberately uses the same term (information) throughout the art (col. 9, lines 1-5), and this cannot be presumed to be mere accident. This can only mean that the "information" received by the client is identical to the "information" received by the server, and thus the applicant's view that they are somehow different is incorrect.

Applicant then argues that Skaanning does not expressly disclose that the printer responder is a web server (P. 5). As shown above, ignoring the fact that Asauchi and Skaanning both teach responders with the same functionality at the applicant's web server, and that the applicant does not claim a single limitation wherein a web server is needed over a simple responder, Examiner does not and has never relied on Skaanning to show the web server located on the printer. If this was somehow unclear, the examiner apologizes.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that Asauchi and Skaanning do not teach a web server, the test for obviousness is not whether the features of a secondary reference may be

bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Applicant then argues that “combining the two references does not make the missing limitations appear without some imaginative application of Applicant’s specification (P. 5).” The examiner urges the applicant to respect the decorum of the office and to keep the language professional.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (P. 5), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The trading of the printer responder with a web server is based on the motivations described and on the recognition that they still perform the reporting functionality. They are further based on the fact that the printer is networked in both cases.

In response to applicant's argument that Wolff cannot be bodily incorporated (Pp. 5-6), the test for obviousness is not whether the features of a secondary reference may be bodily

incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that one of ordinary skill in the art would recognize an advantage of Wolff to get rid of the client computer (Pp. 5-6), the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

In response to applicant's argument that one of ordinary skill in the art would recognize an advantage of Wolff to get rid of the client computer (Pp. 5-6), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Applicant is misinterpreting the combination as disclosed. Asauchi teaches a client computer, a networked printer, and a diagnosing server. Wolff's teaching (col. 10, lines 25-30) does not obviate the need for the client. At best, it teaches the ability to do away with the printer server on the client, replacing it with "a common web interface," i.e. a browser. Replacing the printer server with the browser does not destroy Asauchi, and in fact improves on Asauchi's networking capabilities.

Applicant then argues that the combiner must set it up such that the server directly talks to the printer, bypassing the client. While one of ordinary skill in the art might recognize the possibility, that does not mean that he is required to do so, let alone that Wolff somehow teaches away from the invention. One of ordinary skill in the art would recognize the combination wherein the printer continues to send its messages through the client, regardless of whether a more optimal solution now exists.

Finally, the claims as currently drawn state that messages other than the initial message are sent from the server to the peripheral, that the peripheral automatically responds, and that there is iterative communication between the two. There is no message going to or from the client after step c. The broadest reasonable interpretation of the claims is that they may be construed as messaging through the client or by bypassing the client. The later argument that the information gathering and analysis to occur without human intervention (P. 7), if accepted, lends evidence to the idea of dual interpretation. It is the examiner's position that the combination teaches both embodiments, but the examiner is only obligated to show one. The examiner has taught the former. The applicant's own arguments teach the latter.

In response to applicant's argument that Wolff is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, all of the cited art is drawn towards gathering information and sending orders to a networked printer, wherein a client cooperates with a backend server.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the above arguments have shown that each piece not only provides a benefit to Asauchi, but also fulfills a stated desire.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "forwarding of the peripheral device HTTP message... enables the information gathering and analysis to occur without human intervention (P. 7)") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read

into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Automatically responding to a request is not interpreted the same.

Finally, one can still automatically respond to a message regardless of whether it has been modified. In fact, most modifications and extractions are performed without human intervention, based on automated systems. One of ordinary skill in the art would recognize that modification of the message may even be necessary for automation of responding, i.e. in the case of legacy equipment or multiple vendors.

Regarding claims 4 and 15, applicant argues that Webb does not expressly disclose a PostScript interface residing on the printer (P. 7). Applicant does concede, however, that Webb teaches a PostScript printer driver that delivers data to what applicant considers to be the interface (tool bar). The broadest reasonable interpretation of interface includes not only GUIs and command windows, but also includes any software component that facilitates communication with a separate and distinct component, including a driver. Furthermore, the examiner cited a PostScript interpreter (#135) that renders pages from the data stream manager, The interpreter on controller 72 of printer 16 (Fig. 3; col. 9, lines 55-65).

In the alternative, the particular type of function interface (PostScript, as opposed to any other type) in a non-patentable difference, as it does not impact the structure or functionality of the claims.

Finally, for claims 11 and 22, Applicant argues that the XML file is sent from the server to the client, as opposed to being sent from the peripheral to the client (Pp. 8-9). Lozano teaches

that the printer may provide a diagnostic snapshot in a web page (col. 6, lines 38-41). While it is true that the XML file cited as an example is sent from the server to the client, it is subsequently and without modification compared to the information sent from the peripheral to the client (col. 11, lines 5-35). The most obvious method of solving the issue of comparison is to make both messages the same file type, particularly in an environment where the use of XML has already been mentioned and is prevalent in the art. And without an alternate mention of conversion to a readable format, the peripheral message must inherently be XML.

Further, claims 11 and 22 do not require the XML message to come from the peripheral. The language only requires that it contain information related to the peripheral's functionality, and thus may come from anywhere.

Finally, the particular format of the messages are non-functional, and therefore comprise non-patentable differences. Nothing in the claims makes use of any particular format, such that the change in format leads to a difference in structure or function.

It is for the reasons above that the rejection should be maintained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Art Unit: 2145

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Melvin Pollack

/Melvin H Pollack/
Examiner, Art Unit 2145
10 July 2008

Conferees:

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145

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